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EXAMINER

NGUYEN, HUNG T

ART UNIT

PAPER NUMBER

2632

2

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/981,560

Applicant(s)
Samuel Hopper et al.

Examiner
HUNG NGUYEN

Art Unit
2632



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Oct 17, 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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DETAILED ACTION

Claim Objections

1. Claim 38 is objected to because of the following informalities:

Claim 38 should NOT be depended on claim 38 itself . Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5-7, 9-16, 19-20, 22, 24-26, 28-34 & 54-55 are rejected under 35 U.S.C. 102(b) as being anticipated by Garr et al.(U.S. 5,802,420).

Regarding claims 1 & 9, Garr discloses a method for monitoring depletion of a consumable source as a printing equipment / laser printer (10) in a monitored system [figs.1,7, col.1, lines 7-14 and col.3, lines 24-45] comprising:

- receiving information on at least one unit / laser printer (10) to be processed by the monitored system [figs.1,7, col.3, lines 24-45 and col.13, lines 34-50];

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- determining a rate / level change of source depletion per unit work processed / laser printer (10) [figs.1,7, col.3, lines 24-45 and col.13, lines 34-50];
- estimating an amount of source remaining / toner (504) after the monitored system processes the at least one unit of work [figs.1,7, col.3, lines 24-45 , col.13, lines 34-50 and col.18, lines 15-46];
- generating a graphic element for display on a computer monitor (500) indicating the estimate a mount of the source remaining / toner (504) [figs.1,7, col.13, lines 34-50 and col.18, lines 15-46].

Regarding claims 2-3, 19 & 54, Garr discloses the graphic display (500) comprises a graphical gauge displaying a range of values from zero (0) to maximum capacity (9) includes a needle / dial (512) on the gauge pointing to a position on the gauge indicating the estimated amount of the resource remaining / toner (504) [figs.1,7, col.13, lines 34-50 and col.18, lines 15-46].

Regarding claims 5 & 13, Garr discloses the receiving notification that the consumable resource is depleted in the monitored system / host computer (500) and determining an adjustment factor after the consumable source as a toner is replenished in the monitored system [figs.1,7, col.3, lines 13-45 , col.13, line 34 to col.14, line 54 and col.18, lines 15-46].

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Regarding claims 6 & 14, Garr discloses the method after the consumable resource / toner is fully replenished , initializing the estimated amount of resource remaining to full capacity, wherein estimating the amount of source remaining comprises:

- multiplying the number of one unit of work to process times the rate of resource depletion to estimate an amount of resource depletion that result from processing the at least one unit of work [figs.1,7, col.3, lines 24-45, col.13, lines 34-50 and col.18, lines 15-46];
- setting the estimated amount of resource remaining [figs.1,7, col.3, lines 13-45, col.13, lines 34-50 and col.18, lines 15-46].

Regarding claims 7 & 15, Garr discloses the estimated amount of source remaining indicates that the consumable resource is depleted in the monitored system (500) and generating a message that there is not a sufficient amount of resource remaining to process the at least one unit of work as a laser printer (10) [figs.1,7, col.3, lines 13-45, col.13, line 34 to col.14, line 54 and col.18, lines 15-46].

Regarding claims 10-11 & 29, Garr does mention different printers can be connected to the host computer for monitoring depletion of a consumable source as a printing equipment / laser printer (10) in a monitored system includes three different toner sizes (4,000 , 7,500 & 17,6000 pages) available for a single printer family with identification codes are stored in the EEPROM at the

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RIP level in the printer which could be included a printer model and a unique name of the printer is inherently [figs.1,7, col.15, line 52 to col.16, line 24 and col.18, lines 15-46].

Regarding claim 12, Garr discloses the toner represents a type of inking material that forms black , colored , thermal wax and different material on a print media which could be detected by the processing unit / microprocessor (70) and ASIC (40) in communication with the monitored system / laser printer (10) and the computer monitor (500) for determining the rate of source depletion [figs.1,7, col.7, line 51 to col.8, lines 46].

Regarding claims 16 & 22, Garr discloses a method for monitoring depletion of a consumable source as a printing equipment / laser printer (10) in a monitored system [figs.1,7, col.1, lines 7-14 and col.3, lines 24-45] comprising:

- receiving information on at least one unit / laser printer (10) to be processed by the monitored system / host computer (500) [figs.1,7, col.3, lines 24-45 and col.13, lines 34-50];
- determining a rate / level change of source depletion per unit work processed / laser printer (10)[figs.1,7, col.3, lines 24-45 and col.13, lines 34-50];
- estimating an amount of source remaining / toner (504) after the monitored system / host computer (500) processes the at least one unit of work [figs.1,7, col.3, lines 24-45 , col.13, lines 34-50 and col.18, lines 15-46].

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Regarding claims 20 & 55, Garr discloses the toner represents a type of inking material that forms black or colored on a print media [col.7, lines 63-67].

Regarding claims 24 & 28, Garr discloses a system for monitoring depletion of a consumable resource

[figs.1,7, col.1, lines 7-14 and col.3, lines 24-45] comprising:

- a monitored system (10) that uses the consumable resource as a toner [figs.1,7, col.3, lines 24-45 and col.13, lines 34-50];
- a computer monitor (500) [figs.1,7, col.3, lines 24-45 and col.13, lines 34-50];
- a processing unit / microprocessor (70) and ASIC (40) in communication with the monitored system (10) and the computer monitor (500) [figs.1,7, col.7, line 51 to col.8, lines 46];
- receiving information on at least one unit / laser printer (10) to be processed by the monitored system / host computer (500) [figs.1,7, col.3, lines 24-45 and col.13, lines 34-50];
- determining a rate / level change of source depletion per unit work processed / laser printer (10)[figs.1,7, col.3, lines 24-45 and col.13, lines 34-50];
- estimating an amount of source remaining / toner (504) after the monitored system / host computer (500) processes the at least one unit of work [figs.1,7, col.3, lines 24-45 , col.13, lines 34-50 and col.18, lines 15-46];

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- generating a graphic element for display on a computer monitor (500) indicating the estimate a mount of the source remaining / toner (504) [figs.1,7, col.13, lines 34-50 and col.18, lines 15-46].

Regarding claim 25, Garr discloses the graphic display (500) comprises a graphical gauge displaying a range of values from zero (0) to maximum capacity (9) includes a needle / dial (512) on the gauge pointing to a position on the gauge indicating the estimated amount of the resource remaining / toner (504) [figs.1,7, col.13, lines 34-50 and col.18, lines 15-46].

Regarding claim 26, Garr discloses the receiving notification that the consumable resource is depleted in the monitored system / host computer (500) and determining an adjustment factor after the consumable source as a toner is replenished in the monitored system [figs.1,7, col.13, line 34 to col.14, line 54 and col.18, lines 15-46].

Regarding claim 30, Garr discloses the toner represents a type of inking material that forms black , colored , thermal wax and different material on a print media which could be detected by the processing unit / microprocessor (70) and ASIC (40) in communication with the monitored system / laser printer (10) and the computer monitor (500) for determining the rate of source depletion [figs.1,7, col.7, line 51 to col.8, lines 46].

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Regarding claim 31, Garr discloses the receiving notification that the consumable resource is depleted in the monitored system / host computer (500) and determining an adjustment factor after the consumable source as a toner is replenished in the monitored system [figs.1,7, col.13, line 34 to col.14, line 54 and col.18, lines 15-46].

Regarding claims 32-33, Garr discloses the system for monitoring depletion of a consumable resource comprises the processing unit / microprocessor (70) and ASIC (40) in communication with the monitored system (10) and the computer monitor (500) [figs.1,7, col.7, line 51 to col.8, lines 46];

- a monitored system / laser printer (10) that uses the consumable resource as a toner [figs.1,7, col.3, lines 24-45 and col.13, lines 34-50];
- receiving information on at least one unit / laser printer (10) to be processed by the monitored system / host computer (500) [figs.1,7, col.3, lines 24-45 and col.13, lines 34-50];
- determining a rate / level change of source depletion per unit work processed / laser printer (10) [figs.1,7, col.3, lines 24-45 and col.13, lines 34-50];
- estimating an amount of source remaining / toner (504) after the monitored system / host computer (500) processes the at least one unit of work [figs.1,7, col.3, lines 24-45 , col.13, lines 34-50 and col.18, lines 15-46];

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- generating a graphic element for display on a computer monitor (500) indicating the estimate a mount of the source remaining / toner (504) [figs.1,7, col.13, lines 34-50 and col.18, lines 15-46].
- the graphic display (500) comprises a graphical gauge displaying a range of values from zero (0) to maximum capacity (9) includes a needle / dial (512) on the gauge pointing to a position on the gauge indicating the estimated amount of the resource remaining / toner (504) [figs.1,7, col.13, lines 34-50 and col.18, lines 15-46].

Regarding claim 34, Garr discloses the toner represents a type of inking material that forms black or colored on a print media [col.7, lines 63-67].

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4, 8, 21, 27, 35-51 & 56-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garr et al.(U.S. 5,802,420).

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Regarding claims 4, 8, 21 & 56, Garr does not specifically mention a plurality of printers can be connected to the host computer for monitoring depletion of a consumable source as a printing equipment / laser printer (10) in a monitored system.

However, Garr clearly discloses the computer monitor (500) at the host computer that displays the current toner level as well as the toner prediction information concerning the laser printer (10) and there are three different toner sizes (4,000 , 7,500 & 17,6000 pages) available for a single printer family [figs.1,7, col.3, lines 13-45 , col.13, lines 34-50 and col.18, lines 15-46]. Therefore, it would have been obvious to one having ordinary skill in the art to recognize that the system of Garr can be utilized / programmed for monitoring depletion of consumable source as toners includes black and / or colors in the printing industry by the graphical display for rendering on a computer monitor is generated indicating the estimated amount of the sources remaining.

Regarding claims 27 & 35, Garr does not specifically mention a plurality of printers can be connected to the host computer for monitoring depletion of a consumable source as a printing equipment / laser printer (10) in a monitored system.

However, Garr clearly discloses the computer monitor (500) at the host computer that displays the current toner level as well as the toner prediction information concerning the laser printer (10) and there are three different toner sizes (4,000 , 7,5000 & 17,6000 pages) available for a single printer family [figs.1,7, col.3, lines 13-45 , col.13, lines 34-50 and col.18, lines 15-

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46]. Therefore, it would have been obvious to one having ordinary skill in the art to recognize that the system of Garr can be utilized / programmed for monitoring depletion of consumable source as toners includes black and / or colors in the printing industry by the graphical display for rendering on a computer monitor is generated indicating the estimated amount of the sources remaining.

Regarding claims 36 & 44, Garr discloses an article of manufacturing for monitoring depletion of a consumable resource comprises the processing unit / microprocessor (70) and ASIC (40) in communication with the monitored system (10) and the computer monitor (500) [figs.1,7, col.7, line 51 to col.8, lines 46].

Garr does not include code method for monitoring depletion . However, Garr clearly discloses a different and better way to display output information on the computer monitor (500) by a “gas gauge” to alert a printing management / operator for showing more accurate and clearly warning information [figs.1,7, col.13, lines 34-50 and col.18, lines 15-46];

- a monitored system / laser printer (10) that uses the consumable resource as a toner [figs.1,7, col.3, lines 24-45 and col.13, lines 34-50];
- receiving information on at least one unit / laser printer (10) to be processed by the monitored system / host computer (500) [figs.1,7, col.3, lines 24-45 and col.13, lines 34-50];
- determining a rate / level change of source depletion per unit work processed / laser printer (10) [figs.1,7, col.3, lines 24-45 and col.13, lines 34-50];

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- estimating an amount of source remaining / toner (504) after the monitored system / host computer (500) processes the at least one unit of work [figs.1,7, col.3, lines 24-45 , col.13, lines 34-50 and col.18, lines 15-46];
- generating a graphic element for display on a computer monitor (500) indicating the estimate amount of the source remaining / toner (504) [figs.1,7, col.13, lines 34-50 and col.18, lines 15-46].
- the graphic display (500) comprises a graphical gauge displaying a range of values from zero (0) to maximum capacity (9) includes a needle / dial (512) on the gauge pointing to a position on the gauge indicating the estimated amount of the resource remaining / toner (504) [figs.1,7, col.13, lines 34-50 and col.18, lines 15-46]. Therefore, it would have been obvious to one having ordinary skill in the art to employ the system of Garr for monitoring depletion of consumable source as toners including the monitor screen (500) shows a “gas gauge” indicating more accurately updated the amount of the toners remaining in the cartridge .

Regarding claims 37-38, Garr discloses the graphic display (500) comprises a graphical gauge displaying a range of values from zero (0) to maximum capacity (9) includes a needle / dial (512) on the gauge pointing to a position on the gauge indicating the estimated amount of the resource remaining / toner (504) [figs.1,7, col.13, lines 34-50 and col.18, lines 15-46].

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Regarding claim 39, Garr does not specifically mention a plurality of printers can be connected to the host computer for monitoring depletion of a consumable source as a printing equipment / laser printer (10) in a monitored system.

However, Garr clearly discloses the computer monitor (500) at the host computer that displays the current toner level as well as the toner prediction information concerning the laser printer (10) and there are three different toner sizes (4,000 , 7,500 & 17,6000 pages) available for a single printer family [figs.1,7, col.3, lines 24-45 , col.13, lines 34-50 and col.18, lines 15-46]. Therefore, it would have been obvious to one having ordinary skill in the art to recognize that the system of Garr can be utilized / programmed for monitoring depletion of consumable source as toners includes black and / or colors in the printing industry by the graphical display for rendering on a computer monitor is generated indicating the estimated amount of the sources remaining.

Regarding claim 40, Garr discloses the receiving notification that the consumable resource is depleted in the monitored system / host computer (500) and determining an adjustment factor after the consumable source as a toner is replenished in the monitored system [figs.1,7, col.3, lines 24-45 , col.13, line 34 to col.14, line 54 and col.18, lines 15-46].

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Regarding claim 41, Garr discloses the method after the consumable resource / toner is fully replenished , initializing the estimated amount of resource remaining to full capacity, wherein estimating the amount of source remaining comprises:

- multiplying the number of one unit of work to process times the rate of resource depletion to estimate an amount of resource depletion that result from processing the at least one unit of work [figs.1,7, col.3, lines 24-45, col.13, lines 34-50 and col.18, lines 15-46];
- setting the estimated amount of resource remaining [figs.1,7, col.3, lines 24-45, col.13, lines 34-50 and col.18, lines 15-46].

Regarding claims 42 & 50, Garr discloses the estimated amount of source remaining indicates that the consumable resource is depleted in the monitored system (500) and generating a message that there is not a sufficient amount of resource remaining to process the at least one unit of work as a laser printer (10) [figs.1,7, col.13, line 34 to col.14, line 54 and col.18, lines 15-46].

Regarding claim 43, Garr does not specifically mention a plurality of printers can be connected to the host computer for monitoring depletion of a consumable source as a printing equipment / laser printer (10) in a monitored system.

However, Garr clearly discloses the computer monitor (500) at the host computer that displays the current toner level as well as the toner prediction information concerning the laser printer (10) and there are three different toner sizes (4,000 , 7,500 & 17,6000 pages) available for

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a single printer family [figs.1,7, col.3, lines 24-45 , col.13, lines 34-50 and col.18, lines 15-46].

Therefore, it would have been obvious to one having ordinary skill in the art to recognize that the system of Garr can be utilized / programmed for monitoring depletion of consumable source as toners includes black and / or colors in the printing industry by the graphical display for rendering on a computer monitor is generated indicating the estimated amount of the sources remaining.

Regarding claims 45-46, Garr does mention different printers can be connected to the host computer for monitoring depletion of a consumable source as a printing equipment / laser printer (10) in a monitored system includes three different toner sizes (4,000 , 7,500 & 17,6000 pages) available for a single printer family with identification codes are stored in the EEPROM at the RIP level in the printer which could be included a printer model and a unique name of the printer is inherently [figs.1,7, col.15, line 52 to col.16, line 24 and col.18, lines 15-46].

Regarding claim 47, Garr discloses the toner represents a type of inking material that forms black , colored , thermal wax and different material on a print media which could be detected by the processing unit / microprocessor (70) and ASIC (40) in communication with the monitored system / laser printer (10) and the computer monitor (500) for determining the rate of source depletion [figs.1,7, col.7, line 51 to col.8, lines 46].

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Regarding claim 48, Garr discloses the receiving notification that the consumable resource is depleted in the monitored system / host computer (500) and determining an adjustment factor after the consumable source as a toner is replenished in the monitored system [figs.1,7, col.3, lines 24-45 , col.13, line 34 to col.14, line 54 and col.18, lines 15-46].

Regarding claim 49, Garr discloses the method after the consumable resource / toner is fully replenished , initializing the estimated amount of resource remaining to full capacity, wherein estimating the amount of source remaining comprises:

- multiplying the number of one unit of work to process times the rate of resource depletion to estimate an amount of resource depletion that result from processing the at least one unit of work [figs.1,7, col.3, lines 24-45, col.13, lines 34-50 and col.18, lines 15-46];
- setting the estimated amount of resource remaining [figs.1,7, col.3, lines 24-45, col.13, lines 34-50 and col.18, lines 15-46].

Regarding claim 51, Garr discloses the article for monitoring depletion of a consumable source as a printing equipment / laser printer (10) in a monitored system [figs.1,7, col.1, lines 7-14 and col.3, lines 24-45] comprising:

- receiving information on at least one unit / laser printer (10) to be processed by the monitored system / host computer (500) [figs.1,7, col.3, lines 24-45 and col.13, lines 34-50];

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- determining a rate / level change of source depletion per unit work processed / laser printer (10) [figs.1,7, col.3, lines 24-45 and col.13, lines 34-50];
- estimating an amount of source remaining / toner (504) after the monitored system / host computer (500) processes the at least one unit of work [figs.1,7, col.3, lines 24-45 , col.13, lines 34-50 and col.18, lines 15-46].

Regarding claim 57, Garr discloses the article for monitoring depletion of a consumable source as a printing equipment / laser printer (10) in a monitored system [figs.1,7, col.1, lines 7-14 and col.3, lines 24-45] comprising:

- estimating a number of pages that can be processed with the estimated amount of the source remaining (520) [figs.1,7, col.3, lines 24-45 , col.13, lines 34-50 and col.18, lines 15-67];
- generating information to display with the generated graphical element indicating the estimated number of pages by the “gas gauge” (504) [figs.1,7, col.3, lines 24-45 , col.13, lines 34-50 and col.18, lines 15-46].

6. Claims 17-18 & 52-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garr et al.(U.S. 5,802,420) in view of Acquaviva et al. (U.S. 5,459,556).

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Regarding claims 17-18 & 52-53, Garr fails to mention the determined attributes of the print job includes contrast and boldness / also providing a contrast table and boldness table respectively for setting.

As we know almost every copy machine we are using at the present time has contrast and boldness functions for a user setting from lighter / darker or low , med , and high levels as desired on the copy machine .

Garr discloses a laser printer (10) includes ASIC (40) which acts as a controller and data manipulating device for the various hardware components within the print engine (36) , Read only Memory (ROM) (16) and Random Access Memory (RAM) (30) which divided into several portions for performing several different functions to process of rasterization , a font pool and so on [fig.1, col.4, line 39 to col.5, line 45]. Furthermore, Acquaviva teaches a printer that can measure the toner usage per print. The operator's actuable setting can effect the toner usage and this is taken into account. These operator actuable settings (82) includes the contrast and the lighter / darker controls (94) [figs.1,4, col.6, lines 1-29 and col.7, lines 39-51]. Therefore, it would have been obvious to one having ordinary skill in the art to use the system of Garr as taught by Acquaviva for the user controlling the setting contrast and boldness level of the toner before printing a copy .

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8. Claims 23 & 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garr et al.(U.S. 5,802,420) in view of Sotack et al. (U.S. (U.S. 5,465,619).

Regarding claims 23 & 58, Garr does not specifically disclose the monitored consumable resource is a fuser oil .

Fuser oil is used in the printing equipment to provide improvement of oil distribution on the copy and can be equipped with a cleaning system to remove pick-up impurities.

However, Garr discloses the toner represents a type of inking material that forms black , colored , thermal wax and different material on a print media which could be detected by the processing unit / microprocessor (70) and ASIC (40) in communication with the monitored system / laser printer (10) and the computer monitor (500) for determining the rate of source depletion [figs.1,7, col.7, line 51 to col.8, lines 46] and furthermore, Sotack teaches an apparatus for detecting (402) the level of material such as fuser oil in a container (424) of the printing machine [figs.8,12, col.15, lines 19-47]. Therefore, it would have been obvious to one having ordinary skill in the art to have the system of Garr as taught by Sotack for monitoring the estimate amount of the fuser oil remaining in the printing machine and providing information to the users , service technicians or others to track machine requirements and enhance performance .

Conclusion

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9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Iizuka et al. (U.S. 4,967,181) Fuel level gauge provided with an apparatus for issuing a warning on the amount of remaining fuel.

- Christensen et al. (U.S. 5,682,140) Image forming device within end of life Messaging for consumables.

- Lindner et al. (U.S. 5,937,149) System for controlling the automated printing plate change process in printing machines.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung T. Nguyen whose telephone number is (703) 308-6796. The examiner can normally be reached on Monday to Friday from 8:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Daniel Wu, can be reached on (703) 308-6730. The fax phone number for this Group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Examiner: Hung T. Nguyen

Date: Feb. 5, 2003


DANIEL J. WU
PRIMARY EXAMINER
2/9/03